

REMARKS

Favorable reconsideration and allowance of the claims of the present application are respectfully requested.

In the present Office Action, Claims 1-24 stand rejected under 35 U.S.C. §112, second paragraph as allegedly indefinite for the reasons mentioned at Pages 2-3 of the present Office Action. Claim 1 also stands objected to due to the presence of the phrase "characterized in that".

In response to the claim objection and rejection, applicants have amended Claims 1-4, 6-9, 11, 15-18 and 21-23 in the manner indicated above and have added new Claims 25-29. The amendments to the claims address the formal objection/rejection raised in the present Office Action. Applicants submit that the term "substantial residual moisture" was maintained in amended Claim 1 since the specification at Page 3, lines 1-5 and Page 4, lines 19-29 clearly defines the term. Based on the definitions provided in the specification, the term "substantial residual moisture" is definite.

With respect to the newly added claims, support for new Claims 25 and 26 is found in original Claim 7, support for new Claim 27 is found in original Claim 11, support for new Claim 28 is found in original Claim 16 and support for new Claim 29 is found in original Claims 1 and 6.

In view of the above amendments and remarks, the formal grounds of objection/rejection raised in the present Office Action have been obviated.

Reconsideration and withdrawal of the formal objection/rejection are respectfully requested.

Claims 1-4 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by the article to Hartel. entitled "Crystallization and Drying During Hard Panning". Claims 1-8, 15-17 and 9-24 stand rejected under 35 U.S.C. §103 as allegedly unpatentable over U.S. Patent No. 6,365,203 to Degady, et al. in view of Hartel. Claims 9-14 and 17-18 stand rejected under 35 U.S.C. §103 as allegedly unpatentable over the combined disclosures of Degady, et al., Hartel, and U.S. Patent No. 5,376,389 to Reed, et al.

It is axiomatic that anticipation under §102 requires the prior art reference to disclose every element to which it is applied. In re King, 801 F.2d 1324, 1326, 231 USPQ 36, 138 (Fed Cir, 1986). Thus, there must be no differences between the subject matter of the claim and the disclosure of the prior art reference. Stated another way, the reference must contain within its four corners adequate direction to practice the invention as claimed. The corollary of the rule is equally applicable: absence from the applied reference of any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Applicants respectfully submit that the claimed process of the present application is not anticipated by the disclosure of Hartel since the applied reference does not disclose a process in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air *so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase.*

Hartel describes the fundamentals of crystallization and drying during hard panning. As stated in the article, drying and crystallization occur simultaneously and interact with each other to determine the quality of the final product. As is known to those skilled in the art, crystallization is slow; therefore, quick drying has to be avoided.

Hartel states at Page 55, left hand column that "if the drying occurs too rapidly, the concentration of the syrup phase increases rapidly, but this actually inhibits the rate of crystallization due to increased viscosity. It may also slow the rate of the final drying since a thin skin of rubbery fluid may form which allows drying at a much reduced rate. Also, ... resulting in more moisture remaining within the film. This excess moisture eventually migrates out of the shell... This causes migration of water soluble dyes, which again, is a cause of mottling."

Applicants respectfully submit that the disclosure of Hartel teaches the complete removal of moisture from the film. This is opposite to the claimed invention in which drying is controlled such that a substantial residual moisture content remains in the drying coating layer at the start of the next spraying process. The present invention is based on the realization that it is not necessary to dry the cores completely between sprayings. In this way, the time for each layer and thus the overall coating time is significantly reduced in the present invention. Surprisingly, the presence of a substantial amount of residual moisture does not cause the expected problems in the final product.

The foregoing remarks clearly demonstrate that the applied reference does not teach each and every aspect of the claimed invention as required by King and Kloster Speedsteel; et al., therefore, the claims of the present application are not anticipated by the disclosure of Hartel. Applicants respectfully submit that the instant §102 rejection has been obviated and withdrawal thereof is respectfully requested.

With respect to the obviousness rejections, applicants respectfully submit that the combined disclosures of Degady, et al. and Hartel and the combined disclosures of Degady, et al., Hartel and Reed, et al. do not render the claims obvious. Specifically, none of the applied references teaches or suggests a process for the production of

chewable coated cores in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air *so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase.*

In the principal reference cited in the present Office Action, the complete drying of the coating layer between each spraying step is taught. Degady, et al. disclose a continuous coating process for chewing gum and bubble gum materials. In accordance with Degady, et al., small cores or pieces of gum material are introduced into inclined rotating drums in which heated air is circulated and a coating solution is applied (liquid or powder). The coating material is dried on the pieces of material, and a plurality of thin layers are formed on each of the cores or small pieces of material. A series of rotating drums can be employed to provide the requisite number or thickness of coating layers.

Degady, et al. are defective since the applied reference does not teach or suggest a process in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air *so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase.* In accordance with the disclosure of Degady, et al., hot air is used to dry coated cores (See, Col. 1, line 34) which takes typically 6-7 hours (See Col. 3, line 22). A goal of the Degady, et al. disclosed method is to dry the coating at the same time as the material is coated (See, Col. 2, lines 5-7). Degady, et al. also disclose at Col. 8, line 22 and Col. 9, line 11 the drying of individual pieces of coated cores. Degady, et al. use air which is typically at an elevated temperature such as 80-90 °F which dries the syrup on the gum material (See, Col. 3, lines 6-17). The foregoing cited text indicates that in the applied reference the cores are completely dried prior to the next spray cycle.

Hartel does not alleviate the above defect in Degady, et al. since the applied secondary reference also does not teach or suggest a process in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air *so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase*. As indicated above in the anticipation rejection, Hartel discloses the complete drying of the cores prior to the next spraying cycle.

Reed, et al. also do not alleviate the above defect in Degady, et al. and Hartel since the applied reference fails to teach or suggest a process in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air *so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase*.

Reed, et al. provide a dual composition hard coated chewing gum, which includes from about 35 to about 90 weight percent of a gum center, including a bulk portion, a chewing gum base and one or more flavoring agents; and from about 10 to about 65 weight percent of an outer coating containing from about 50 to about 100%, by weight, of xylitol and non-xylitol polyol, which comprises at least two sequential layers of from about 50 to about 100%, by weight, of xylitol and from about 50 to about 100%, by weight, of non-xylitol polyol. The chewing gum product disclosed in Reed, et al. is produced by a process that includes the steps of: (1) forming a gum center including a bulk portion, a chewing gum base portion, and one or more flavoring agents; (2) forming a non-xylitol polyol liquid coating syrup comprising solvent and from about 50 to about 80% non-xylitol polyol, by weight of the non-xylitol polyol liquid coating syrup; (3) applying a plurality of coats of the non-xylitol polyol liquid coating syrup to the gum center; (4) forming a xylitol liquid coating syrup comprising solvent and from about 50

to about 85% xylitol, by weight of the xylitol liquid coating syrup; (5) applying a plurality of coats of the xylitol liquid coating syrup to the non-xylitol polyol-coated gum center; and (6) evaporating the solvent from each coat of the xylitol and non-xylitol polyol liquid coating syrups, prior to applying the next coat; the number of coats applied in steps (3) and (5) being sufficient to provide a coating constituting of from about 10 to about 65 weight percent of the total coated chewing gum product.

The applying steps disclosed in Reed, et al. include drying and spraying. Drying is performed in the applied reference to completely remove moisture from each coated layer prior to the application of an additional layer. There is no disclosure in Reed, et al. that the drying is performed in the controlled manner recited in the amended claims of the present application so as to *cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase.*

The §103 rejections also fail because the prior art references provide no motivation to modify the disclosed processes to include a drying step in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air *so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase.* The law requires that the prior art references provide some teaching, suggestion or motivation to make the modification. Here, there is no motivation provided in the disclosures of the applied references which would lead one skilled in the art to make the modification to the prior art processes mentioned hereinabove. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q. F.2d 1780, 1783-84 (Fed. Cir. 1992).

Based on the above amendments and remarks the rejections to the claims under 35 U.S.C. §103 have been obviated; therefore reconsideration and withdrawal of the instant rejections raised in the previous Office Action are respectfully requested.

Thus, in view of the foregoing amendments and remarks, it is firmly believed that the present case is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



Leslie S. Szivos, Ph.D.
Registration No. 39,394

SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
Garden City, New York 11530
(516) 742-4343

LSS/sf